

PEMODELAN ESTIMASI HARGA POKOK PRODUKSI BETON DI PULAU JAWA

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The basic cost of concrete production is important for the construction industry, including construction of infrastructure because it will affect the overall costs incurred from construction services activities. The use of the suitable (cheap) cost of concrete production will benefit the government in infrastructure development.

This research begins with the existence of problems in infrastructure construction project activities, followed by establishing relevant previous research, and is based on a literature study that explains the concepts and theories of estimating the cost of concrete production that vary between concrete companies, even though they are close together and even one factory, underlying this research.

The purpose of the research is to make the Modeling Estimation of the Cost of Concrete Production in the construction of infrastructure, identify the factors that have a strong influence on the Cost of Concrete Production, then make modeling.

This research uses survey techniques, examining ten independent variables: Cement Usage (X1), Coarse Aggregate Use (X2), Coarse Aggregate Price (X3), Sand Usage (X4), Sand Price (X5), Sales (X6), Equipment Productivity (X7), Concrete Delivery Distance (X8), Equipment Rental (X9), and Employee Salary (X0). Dependent variable: Modeling Estimation of Basic Cost of Concrete Production (Y).

The population used is a concrete company on the island of Java, including East Java Province, Central Java Province, and West Java Province. The reason for choosing Java Island as a location is because it has 38 concrete companies. Data analysis uses statistical analysis in the form of descriptive analysis and inferential analysis.

Out of the 10 independent variables studied, there were 6 independent variables that had a strong influence on the formation of Modeling Estimates of Basic Cost of Concrete Production. There are Variable X1 = Cement Usage, X2 = Coarse Aggregate Usage, X4 = Sand Usage, X7 = Productivity of Equipment, X8 = Concrete Delivery Distance, X9 = Equipment Rental.

Modeling Findings of Basic Cost Estimation of Concrete Production this research has been validated with the hope that the findings could be implemented in infrastructure construction projects.

Out of the 6 independent variables that have such a strong influence, it was found that Coarse Aggregate Usage (X2) had the strongest influence on the formation of Modeling Estimated of Basic Cost of Concrete Production for an Infrastructure project.

Keywords: Modeling Estimation of Basic Cost of Concrete Production; Infrastructure Project